

Please amend the subject application as follows:

IN THE CLAIMS:

Please accept amended claims 1, 11, 21, 23 and 24 as follows:

1. (currently amended) A method of switching packets, comprising:

preparing a plurality of tables, wherein each table corresponds to one output port of a plurality of output ports, ~~the one output port being the only destination port for the table;~~

storing a plurality of input port designations in each table, wherein each input port designation corresponds to at least one input port of a plurality of input ports;

storing a plurality of packet identifiers in each table, wherein each packet identifier is stored together with an input port designation of the plurality of input port designations;

inputting at least one packet into an input port of the plurality of input ports, wherein the at least one packet includes a packet identifier;

locating a packet identifier from the plurality of packet identifiers stored in each table that matches the packet identifier of the at least one packet by simultaneously searching each table for the packet identifier of the at least one packet, wherein the packet identifiers stored in each respective table are directed to the same output port;
and

connecting an input port corresponding to an input port designation stored with the located packet identifier, with one or more output ports of the plurality of output ports.

2. (original) The method as recited in claim 1, wherein at least one of the plurality of packet identifiers stored in each table identifies an input port of the plurality of input ports.

3. (original) The method as recited in claim 1, wherein at least one of the plurality of packet identifiers stored in each table identifies one output port or more than one output port of the plurality of output ports.

4. (original) The method as recited in claim 1, wherein the packet identifier of the at least one packet identifies an input port of the plurality of input ports.

5. (original) The method as recited in claim 1, wherein the packet identifier of the at least one packet identifies one output port or more than one output port of the plurality of output ports.

6. (original) The method as recited in claim 1, wherein at least one packet identifier of the plurality of packet identifiers stored in each table identifies a multicast packet.

7. (original) The method as recited in claim 1, wherein the packet identifier of the at least one packet identifies a multicast packet.

8. (original) The method as recited in claim 1, wherein each table is configured as a semiconductor memory.

9. (original) The method as recited in claim 1, wherein each packet identifier is stored together with the input port designation as one datum including a plurality of bits.

10. (original) The method as recited in claim 1, wherein the one or more output ports are determined based on each table storing the located packet identifier.

11. (currently amended) A method of switching cells, comprising:
preparing a plurality of tables, wherein each table corresponds to one output port of a plurality of output ports, ~~the one output port being the only destination port for the table;~~

storing a plurality of input port designations in each table, wherein each input port designation corresponds to at least one input port of a plurality of input ports;

storing a plurality of cell identifiers in each table, wherein each cell identifier is stored together with an input port designation of the plurality of input port designations;

inputting at least one cell into an input port of the plurality of input ports, wherein the at least one cell includes a cell identifier;

locating a cell identifier from the plurality of cell identifiers stored in each table that matches the cell identifier of the at least one cell by simultaneously searching each table for the cell identifier of the at least one cell, wherein the cell identifiers stored in each respective table are directed to the same output port; and

connecting an input port corresponding to an input port designation stored with the located cell identifier, with one or more output ports of the plurality of output ports.

12. (original) The method as recited in claim 11, wherein at least one of the

plurality of cell identifiers stored in each table identifies an input port of the plurality of input ports.

13. (original) The method as recited in claim 11, wherein at least one of the plurality of cell identifiers stored in each table identifies one output port or more than one output port of the plurality of output ports.

14. (original) The method as recited in claim 11, wherein the cell identifier of the at least one cell identifies an input port of the plurality of input ports.

15. (original) The method as recited in claim 11, wherein the cell identifier of the at least one cell identifies one output port or more than one output port of the plurality of output ports.

16. (original) The method as recited in claim 11, wherein at least one cell identifier of the plurality of cell identifiers stored in each table identifies a multicast cell.

17. (original) The method as recited in claim 11, wherein the cell identifier of the at least one cell identifies a multicast cell.

18. (original) The method as recited in claim 11, wherein each table is configured as a dynamic random access memory.

19. (original) The method as recited in claim 11, wherein each cell identifier is stored together with the input port designation as one datum including a plurality of bits.

20. (original) The method as recited in claim 11, wherein the one or more output ports are determined based on each table storing the located cell identifier.

21. (currently amended) A switching apparatus comprising:
a plurality of input ports, wherein each of the plurality of input ports is capable of receiving at least one packet including a packet identifier;
a plurality of output ports;
a plurality of tables for storing a plurality of packet identifiers and a plurality of input port designations corresponding to the plurality of input ports, wherein each table corresponds to one output port of the plurality of output ports and stores each packet identifier together with an input port designation of the plurality of input port designations, wherein the packet identifiers stored in each respective table are directed to the same output port and each of the plurality of tables are simultaneously searched to locate a packet identifier from the plurality of packet identifiers stored in each table that matches the packet identifier of the at least one packet the one output port being the only destination port for the table;
a switching control unit for outputting a signal for connecting an input port corresponding to an input port designation stored with the packet identifier of the at least one packet, with at least one output port of the plurality of output ports.

22. (original) The switching apparatus as recited in claim 21, wherein the switching unit connects the input port corresponding to the input port designation stored with the packet identifier of the at least one packet with the at least one output port.

23. (currently amended) A method of switching packets, comprising:

storing a plurality of input port designations in a plurality of tables, wherein each input port designation corresponds to at least one input port of a plurality of input ports, and wherein each table corresponds to one output port of a plurality of output ports, ~~the one output port being the only destination port for the table;~~

storing a plurality of packet identifiers in the plurality of tables, wherein each packet identifier is stored together with an input port designation of the plurality of input port designations;

inputting at least one packet into an input port of the plurality of input ports, wherein the at least one packet includes a packet identifier;

locating a packet identifier from the plurality of packet identifiers stored in the plurality of tables that matches the packet identifier of the at least one packet by simultaneously searching each table for the packet identifier of the at least one packet, wherein the packet identifiers stored in each respective table are directed to the same output port; and

connecting an input port corresponding to an input port designation stored with the located packet identifier, with at least one output port of the plurality of output ports.

24. (currently amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for switching a packet, the method steps comprising:

storing a plurality of input port designations in a plurality of tables, wherein each input port designation corresponds to at least one input port of a plurality of input ports, and wherein each table corresponds to one output port of a plurality of output ports, ~~the~~

~~one output port being the only destination port for the table;~~

storing a plurality of packet identifiers in the plurality of tables, wherein each packet identifier is stored together with an input port designation of the plurality of input port designations;

inputting at least one packet into an input port of the plurality of input ports, wherein the at least one packet includes a packet identifier;

locating a packet identifier from the plurality of packet identifiers stored in the plurality of tables that matches the packet identifier of the at least one packet by simultaneously searching each table for the packet identifier of the at least one packet, wherein the packet identifiers stored in each respective table are directed to the same output port; and

connecting an input port corresponding to an input port designation stored with the located packet identifier, with at least one output port of the plurality of output ports.